



solution K850

Sharpening, re-toothed and chamfering of metal-cutting circular saw blades with CBN-abrasive grinding

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The saw sharpening machine solution K850 is the ideal machine for fully automatic complete machining of metal-cutting circular saws easily integrated in a multi-machine shop set-up.

Complete machining in single set-up and superior grinding quality convince every sharpening professional.

State-of-the-art machine control facilitates the separation of machine set-up and machine operation. Within minutes, the machine programmer sets up all saws for sharpening. The machine operator only needs to load the saws and push the start button. The machine takes care of the rest.

Like the KSC series the K850 utilizes direct drive grinding technology to provide maximum performance while eliminating vibrations.

The K850 is also prepared to grind friction and solid carbide saws in addition to HSS saws and segmental saws.

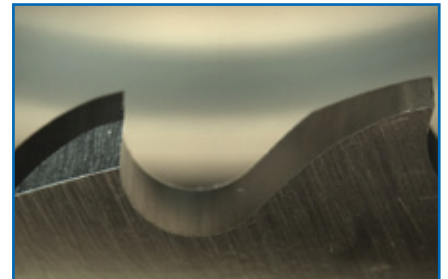
The machine is ready for re-sharpening of thin kerf metal cutting saw blades with chip guiding notches (carbide-tipped and CERMET type disposable saws - including grinding of the spoon face).

The machine can automatically grind the chamfers after re-sharpening or re-toothing of saws.

An additional saw support device at the grinding point ensures completely symmetrical chamfering even on blades that are not perfectly plane.



Direct drive to the grinding spindle



Automatic chamfering



Integrated 300l/75 gallons coolant tank



5 controlled axes, including
2 simultaneous CNC controlled axes

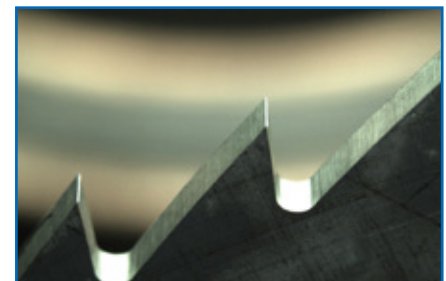
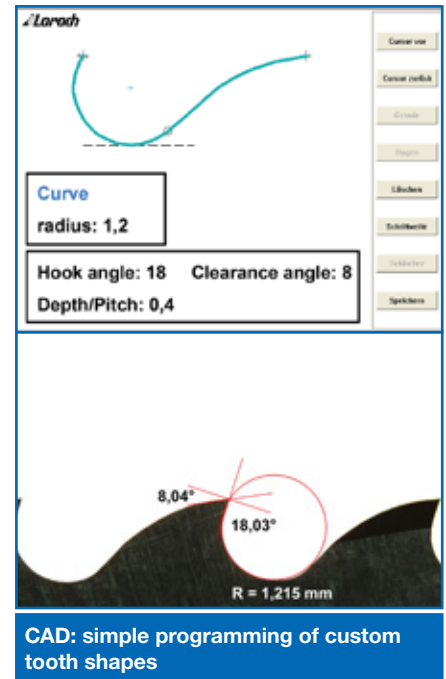
solution K850 accessories

The following options are already included with the standard K850 machine:

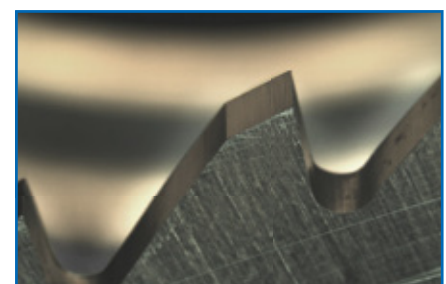
- ✎ Automatic saw blade diameter recognition
- ✎ Automatic grinding wheel insertion with verification of the saw blade data
- ✎ Additional saw support at grinding point
- ✎ Automatic chamfering of saw blades
- ✎ Direct drive grinding technology
- ✎ Changing of grinding speed between diamond grinding wheels or CBN grinding wheels
- ✎ bevel grinding 45 degrees
- ✎ Machine mounted pivoting machine control with large LCD display, integrated keyboard and Windows operating system
- ✎ Complete coolant system incl. 300l/75 gallons coolant tank with 6 bar/87 PSI high-pressure pump and coolant filtration
- ✎ Integrated control remote access system for diagnosis, training and software updates including complementary machine data back-up at Loroch headquarters

The following options are available as upgrades:

- ✎ CAD program for the design of custom tooth geometries
- ✎ Variable tooth-pitch
- ✎ Program to grind multiple saw blades to the exact same blade diameter
- ✎ External coolant fine-filtration system to remove HSS chips and carbide particles
- ✎ Air-mist exhauster
- ✎ Machine modified for use of oil coolant instead of water-based emulsion



Example pointed tooth



Example solid carbide tooth



Example carbide tooth of a thin kerf saw blade (disposable saw)

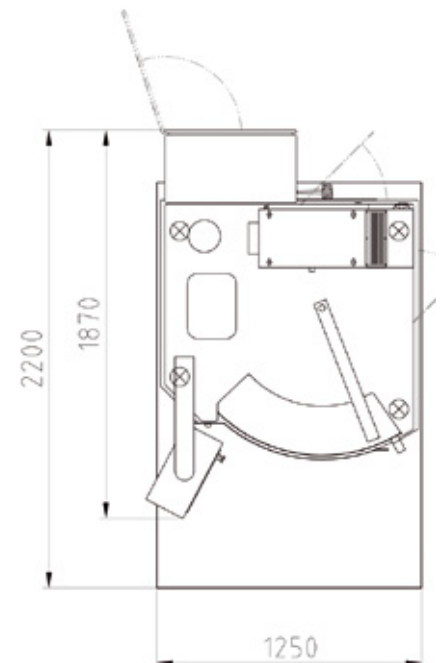
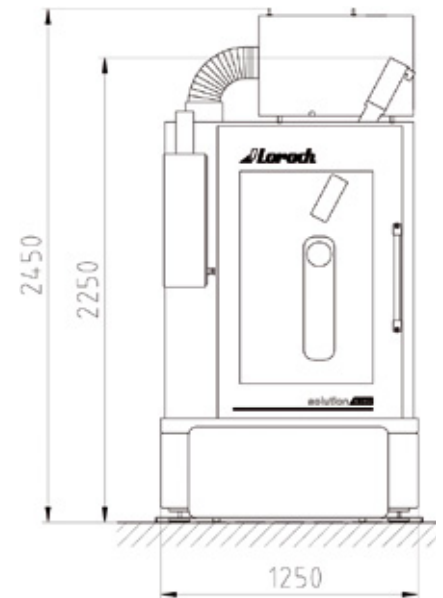


External coolant fine-filtration system with chiller

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Advantages at a glance

- ✎ Automatic sharpening, re-toothing and chamfering of saw blades.
- ✎ Ideal machine for multi-machine shop set-up: load or enter saw blade data – set-up saw blade – push START!
- ✎ Grinding programs can be entered in advance while machine is in operation
- ✎ Additional saw support at the tooth that is ground provides for continued symmetrical chamfering, even with saw blades that are not perfectly plane.
- ✎ Only one flange required for saw blades ranging from 130mm to 850mm.
- ✎ The CAD program option allows for grinding of completely custom tooth geometries optimized for demanding applications.
- ✎ Absolute pitch accuracy
- ✎ Superior grinding finish due to vibration eliminating direct drive technology, CBN-abrasive grinding and coolant fine-filtration system
- ✎ Machine available for use with water-based emulsion or oil coolant.



Technical Data

Working range

Saw blade diameter	Ø 40 – 850 mm
Autom. chamfering	Ø (120) 145 mm
Tooth pitch	1 – 55 mm
Number of teeth	2 – 998
Sawblade thickness	up to 8 mm

Grinding wheels

CBN-grinding wheel	Ø 200 mm
Bore size	Ø 32 mm

Cooling

Coolant pressure	approx. 6 bar
Coolant type	Water emulsion/Oil
Coolant quantity	300 l

Electrical installation

Power input grinding motor	3 kW
Power input machine	approx. 5.5 (7.5) kW

Weight

approx. 1600 kg

Dimensions (W x D x H)

Machine	1250 x 1870 x 2250 mm
Height with electro static air extractor	approx. 2450 mm
Height for door opening	minimum 2020 mm !

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